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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,561	04/06/2007	Torstein Ljungmann	930060-2012	1584

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Ronald R. Santucci
Frommer Lawrence & Haug LLP
745 Fifth Avenue
New York, NY 10151

EXAMINER

CLEVELAND, TIMOTHY C

ART UNIT	PAPER NUMBER
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1774

MAIL DATE	DELIVERY MODE
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12/27/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,561	Applicant(s) LJUNGMANN ET AL.	
	Examiner Timothy Cleveland	Art Unit 1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 November 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The prior art rejection has been slightly modified in light of the amendment. The 35 USC § 112, second paragraph rejection has been withdrawn.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1, 2, 4, and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tacha (US Patent 6,580,056) in view of Lohr et al. (US Patent 3,800,778) and further in view of "GB1 Programmable Temperature Controller" internet publication (digitry.com, archived on 17 October 2002; hereinafter "Digitry").

4. In regards to claim 1, Tacha teaches a pressure cooker (10) for the heating of biological specimens (abstract). The pressure cooker (10) has a temperature sensor (29), a pressure sensor (pressure gauge 13) attached to the lid, and a control unit (controller 14) that may be arranged to enable the setting of a plurality of set points with a temperature and timer duration. The set points require the start button to be pressed to start the next programmed set point (col. 4 lines 14-28).

5. Tacha does not teach a vent valve attached to the pressure cooker or programmed step-by-step heating or cooling courses that are controlled by the control unit via a data program.

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6. In the analogous art of pressure cookers for food preparation, Lohr et al. teaches a pressure cooker (steam cooker 1) with a vent valve (safety valve 7 or regulator device 8) for the benefit of preventing the pressure cooker from rupturing by reaching dangerously high pressure.

7. Lohr et al. does not teach programmed step-by-step heating or cooling courses that are controlled by the control unit via a data program.

8. In the analogous art of temperature controllers, Digitry discloses a programmable temperature controller that can store up to 15 set points for each of 10 separate temperature schedules. As shown on page 3, the device is capable of having a step-by-step heating and cooling course that is programmed into the device with the sequence of commands listed in the table. As the reference makes clear, temperature controllers of this sort are well known in the art of process control and have been available for many years. One of ordinary skill would realized that temperature and pressure are directly related in a system with a constant volume, as shown by the ideal gas law ($PV=nRT$). Therefore, if temperature is controlled, pressure is necessarily controlled as well.

9. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the apparatus of Tacha with the safety valve of Lohr et al. and the temperature controller of Digitry for the increased safety and process control of the pressure cooker.

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10. In regards to claim 2, Tacha teaches that the control unit comprises a processor (31) that controls the temperature courses by means of a data program (see Figures 5 and 7; col. 3 lines 45-54; col. 3, line 64 – col.4 line 13).

11. In regards to claims 4 and 8, Tacha teaches a pressure cooker (10) and a control unit (controller 14). The pressure cooker (10) and the control unit (controller 14) are integrated for the treatment of biological specimens (abstract). Therefore, the combination meets the structural limitations of the treatment apparatus. The dewaxing of tissue specimens constitute a recitation of intended use, and is not given patentable weight.

12. Claims 3, 7 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tacha (US Patent 6,580,056) in view of Lohr et al. (US Patent 3,800,778) further in view of "Digitry" internet publication (digitry.com, archived on 17 October 2002), and even further in view of Kwon et al. (US Patent 6,283,015).

13. In regards to claim 3 and 7, Lohr et al. teaches attaching a vacuum pump (6) to a pressure cooker (steam cooker 1) as to lower the boiling temperature of water to steam foods (col. 2 lines 42-52).

14. Lohr et al. does not teach that the vacuum pump (6) is connected to the pressure cooker (steam cooker 1) via an electric valve. However, Lohr et al. does provide a valve (pressure regulator 8) connected to the pressure cooker for the control of pressure in the unit (col. 2 lines 1-9). Furthermore, Lohr et al. teaches that the vacuum pump can automatically control the pressure level in the in the pressure vessel (2) (col. 2 lines 41-52)

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15. In the analogous art of pressurized cooking vessels, Kwon et al. teaches the use of an electric valve (solenoid valve 20; see col. 2 lines 31-39) for the benefit of venting of steam from within the pressurized cooking vessel (10).

16. It would have been obvious for one of ordinary skill in the art at the time of the invention to combine the previous combination of claim 1 or 2 along with the vacuum pump of Lohr et al. with the electric valve of Kwon et al. for the purpose of controlling the pressure level in the pressure cooker.

17. In regards to claim 9, Tacha teaches a pressure cooker (10) and a control unit (controller 14). The pressure cooker (10) and the control unit (controller 14) are integrated for the treatment of biological specimens (abstract). Therefore, the combination meets the structural limitations of the treatment apparatus. The dewaxing of tissue specimens constitutes a recitation of intended use, and is not given patentable weight.

18. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tacha (US Patent 6,580,056) and Lohr et al. (US Patent 3,800,778) and "Digitry" internet publication (digitry.com, archived on 17 October 2002), further in view of Ljungmann (US Patent 6,017,495) and even further Christensen et al. (US Patent 6,544,798).

19. In regards to claim 5, Tacha teaches a treatment apparatus (combination of pressure cooker 10 and controller 14) that is heated by a hot plate (heating element 20, see figures 2 and 3).

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20. Tacha, Lohr et al., and Digity do not teach a revolving unit, rotatable plate, vessels, receiving baskets, loading magazine, motor, or hoist device.

21. In the analogous art of tissue staining devices, Ljungmann teaches a device for staining large quantities of tissue samples on microscope slides through the use of containers that can hold multiple slides for the benefit of high production capacity. See abstract and col. 1 lines 61-64. Ljungmann teaches vessels (5) for receiving baskets (7) containing microscope slides (abstract), a loading magazine for baskets (fetching/unloading stations 1), a driving motor (col. 3 lines 62-64), and a hoist device (17). See Figure 2. The operation of the hoist device constitutes a statement of intended use and is not given patentable weight.

22. Ljungmann does not teach the use of a revolving unit or a revolving plate.

23. In the analogous art of tissue sample preparation devices, Christensen et al. teaches an automated tissue preparation device that will remove embedding material from the sample and stain the sample. Christensen et al. teaches the use of a revolving unit (carousel 34) and a rotatable plate (tray 29) driven by a motor (col. 6 line 8) for the heating of the microscope slides on a hot plate (thermal platform 50). See Figures 1 and 4.

24. It would have been obvious for one of average skill in the art to combine the combination of claim 4 with the structure of Ljungmann and the revolving unit of Christensen et al. for the purpose of pressure cooking large quantities of tissue samples an equal amount.

Response to Arguments

25. Applicant's arguments filed 11/11/2010 have been fully considered but they are not persuasive.

26. Applicant argues that the prior art does not teach controlling pressure. The Examiner respectfully disagrees. One of ordinary skill would realize that temperature and pressure are directly related in a system with a constant volume, as shown by the ideal gas law ($PV=nRT$). Therefore, if temperature is controlled, pressure is necessarily controlled as well.

Conclusion

27. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Cleveland whose telephone number is

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(571)270-5041. The examiner can normally be reached on Monday-Thursday 7:30-5 EST alt Friday 8:30-4 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on (571)272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Timothy Cleveland/

/Walter D. Griffin/
Supervisory Patent Examiner, Art Unit 1774